Name: _____ Date: _____ Period: _____

Unit 4 Day 3 - Writing Systems of Equations Part 1 Classwork

Translate these phrases into mathematical equations:

1. Four less than twice a number is nine.

2. Twice a number is 18 more than five times the number.

3. Ten times x is twice the sum of x and eight.

Match the sentence in the first column with the corresponding equation in the second column:

4. Three less than twice a number is eight.   a) $3x - 2 = 8$

5. Three times the quantity two less than x is eight.   b) $3(x - 2) = 8$

6. Two less than the product of three and x is eight.   c) $3·2 - x = 8$

7. Two times the number which is three less than x is eight.   d) $2x - 3 = 8$

8. Three times two decreased by x is eight.   e) $2(x - 3) = 8$

For each problem define your variables, write a system of equations, and solve the system of equations.

9. Jose watched 6 times as many hours of television over the weekend as Doreen. Together they watched a total of 14 hours of television. How many hours of television did each person watch over the weekend?

a) What are your variables? What do they represent?

b) Write the 2 equations.

c) Solve the system.

10. Two numbers have a sum of 21. One number is 3 more than the other one. What are the two numbers?

a) What are your variables? What do they represent?

b) Write the 2 equations.

c) Solve the system.

11. In a recent post-season, Adam Vinatieri of the Indianapolis Colts made a total of 21 field goals and extra-point kicks for a total of 49 points. If a field goal is 3 points and an extra-point kick is 1 point, how many field goals and how many extra-point kicks did he make?

a) What are your variables? What do they represent?

b) Write the 2 equations.

c) Solve the system.